

Why You Should Consider an Alternative Email Platform

An Osterman Research White Paper

Published June 2009

SPONSORED BY



Executive Summary

Email has become more critical to the communications needs of small and large organizations than the telephone, real-time communications systems, fax or even in-person meetings. For example, a survey conducted by Osterman Research in March 2009 found that the typical user spends two hours 32 minutes on a typical workday doing something in their email client. By contrast, that user will spend slightly less time on a typical day attending in-person meetings and talking on the telephone combined.

What this means is that email systems must satisfy a variety of requirements for various entities in an organization:

- Users must be able to access email whenever and wherever they are located, including from their home computers and from mobile devices.
- IT administrators must be able to deploy, configure and manage the email system with as little effort as possible, a requirement exacerbated by the recent economic downturn that has seen IT budgets tightening.
- Business managers must be able to ensure that email services, including robust security capabilities, are maintained as inexpensively as possible.
- The growing interest in cloud-based computing means that email services that are maintained by service providers must also be robust and able to support users in organizations large and small.

A survey conducted by Osterman Research in March 2009 found that the typical user spends two hours 32 minutes on a typical workday doing something in their email client. By contrast, that user will spend slightly less time on a typical day attending in-person meetings and talking on the telephone combined.

What organizations of all sizes need, therefore, is an email capability that is highly reliable, highly scalable and inexpensive to operate.

ABOUT THIS WHITE PAPER

This white paper is sponsored by Gecad Technologies, the developer of AXIGEN, an alternative to Microsoft Exchange. While Exchange is a solid and robust email platform that has roughly 150 million users in its installed base, it has a higher TCO than AXIGEN and does not support a variety of server operating system or client access modes.

It is important to note that the goal of this white paper is simply to compare the features and benefits of both Exchange and AXIGEN, not to denigrate the many features and capabilities of Exchange.

What Should a Mail Server Do?

EMAIL IS CRITICAL TO USERS AND ORGANIZATIONS

Virtually anyone who uses email at work understands how important this capability to getting his or her work done. For example, an Osterman Research survey conducted during March 2009 found that the typical user spends 152 minutes each day working in email. Based on an average workday of nine hours nine minutes discovered in that survey, the typical user spends 28% of his or her day doing something in their email client. Interestingly, we found virtually identical results for both smaller and larger organizations with a difference of only one minute in the average time spent using email on a typical day.

In addition to spending more than one-quarter of their day in email, most users also check work-related email from home on weekdays after hours and on weekends. Further, a large proportion of users access their work email while on vacation.

TWO KEY TAKEAWAYS

There are two key takeaways from these findings:

- Email must be extraordinarily reliable to support its continual access by users during the day, at night and on weekends.
- Email is a critical tool for users in organizations of all sizes. While there are typically more sophisticated requirements in larger organizations, users in smaller organizations must also have reliable access to email capabilities.

IS EMAIL A COMMODITY?

Not really. Email is a critically important business tool, but given the differences that exist between the wide variety of email systems in the market, it would be difficult to justify the notion that email has yet been commoditized. However, the critical importance of email and the need for it to operate with virtual 100% reliability does place email into the realm of “utility”.

Because they are utilities, email systems must operate very reliably; that support the features that users need; and that can be licensed, deployed and managed as inexpensively as possible. It is critical, therefore, particularly during challenging economic times, to implement email capabilities that will support IT requirements for very high reliability and ease of management, as well as business requirements to minimize costs wherever possible.

Deployment Scenarios

While there is some commonality of system requirements across small organizations, large organizations and carriers that provide hosted email services, there are differences in the requirements that each type of organization has for its email capabilities.

WHAT ABOUT MICROSOFT EXCHANGE?

Microsoft Exchange is a robust and capable email platform. Originally released in mid-1996, the past 13 years have seen development of the product to include clustering, Webmail capabilities and a host of various features and functions. Exchange 2007, the current release of the platform, includes a variety of server roles, including unified messaging. Exchange, with an installed base of roughly 150 million seats, is the market leader in North America and is used by a variety of small and large organizations, as well as by a large number of hosted email providers.

Given the widespread acceptance of Exchange and its large number of features and functions, it is reasonable to question why there might be a need for another email platform that can offer Exchange-like capabilities. The bottom line is cost. Exchange is not an inexpensive platform to deploy or maintain. For example, Osterman Research has calculated that the cost of deploying and managing Exchange for a 100-seat organization is in the range of \$35-\$40 per seat per month, while for a 1,000-seat organization the cost will be on the order of \$12-\$15 per seat per month (with wide variability in these costs owing to various architectural and deployment factors).

Given the widespread acceptance of Exchange and its large number of features and functions, it is reasonable to question why there might be a need for another email platform that can offer Exchange-like capabilities.

What this means is that while Exchange is a very robust and solid email platform, there is room for other platforms that can provide the Exchange-like features that users and organizations require, but that can be licensed, deployed and managed at lower cost.

WHAT ABOUT AXIGEN MAIL SERVER?

AXIGEN is a flexible messaging and collaboration solution designed to meet the requirements of both small and large enterprises, and service provider environments. It features increased speed and productivity, as well as advanced security and ease of administration, enabling organizations to keep email communication under full control, while remaining highly-affordable and profitable in terms of TCO.

LOW-END ENTERPRISE ENVIRONMENTS

In order to address the needs of small and medium businesses, an email server needs to have a variety of key features. These include the basic features and functions needed to satisfy generalist email requirements, including:

- It must be easy to install, configure and manage, particularly for organizations or satellite offices of larger organizations that may not have dedicated IT staff.
- It must require as little additional expertise and infrastructure as possible.

- It must have a low cost of acquisition and management.
- It must provide robust security and filtering capabilities to protect against the growing variety of spam and malware traversing the Internet.

While Exchange can satisfy the email requirements for smaller organizations, it has a much higher total cost of ownership (TCO) compared to AXIGEN. At the same time, installing and managing the server can be quite a time-consuming task for an inexperienced administrator. In turn, this adds either additional support costs, or it requires official training on top of the solution's base price. This is an important decision factor for most mid-sized organizations, particularly during the current economic downturn.

AXIGEN, on the other hand, has a much lower baseline TCO and a free license for up to five accounts with unlimited support tickets for a year is available. Although the five-account license will not be sufficient for more than the very smallest of organizations, there are a variety of online resources and free online training sessions that can support deployment of the AXIGEN system for even inexperienced administrators.

For small-scale environments, Exchange also has a significant number of requirements and dependencies to deploy. For example, deployment of Exchange also requires deployment and configuration of Windows Server and a domain controller. While this is a useful requirement for Exchange and simplifies the management of the more advanced features available with Exchange, it cannot truly be justified in a very small deployment.

Helping AXIGEN to achieve a much lower TCO is the fact that it can run on a variety of inexpensive or free operating systems, such as Ubuntu, CentOS and various UNIX-based operating systems. Further, AXIGEN will run on 32-bit hardware, allowing an organization to repurpose an unused server.

Both Exchange and AXIGEN offer very good security. AXIGEN appears to be more secure because only two vulnerabilities have ever been reported for the system and both were addressed in less than 24 hours. However, it is unfair to compare the exposure of Exchange to the malicious user community because of the dramatically greater number of Exchange servers in use and the Server's greater longevity. On balance, both systems should be considered quite secure for smaller environments, as well as larger ones.

HIGH-END ENTERPRISE ENVIRONMENTS

Large enterprises with hundreds or thousands of email users have advanced requirements and rely on email to an even greater extent than do small organizations, in large part because many users in these organizations are geographically distributed. In addition to the same requirements of low-end enterprise environments, large organizations generally require a refined quality of service and more features and functions, including the following:

- Calendaring, sharing and permissions
- Detailed reports and usage statistics
- Custom filtering and message rules
- Easy to use Webmail with sophisticated features that emulate the full client experience

- Integration with other network systems
- High availability and basic clustering

Although there is actually a much larger list of features and functions that are required for email by larger enterprises, the list above should be more than sufficient to outline the type of requirements that must be met by a high-end email solution.

Not surprisingly, Exchange meets the needs of this type of environment more fully than it can meet the needs of smaller organizations. In particular, when a large organization has built its network using Microsoft services and applications – Windows Server, Windows for client devices, Outlook and Internet Explorer – and coupled these with a fully functional Exchange deployment, the result is a robust and full-featured environment that satisfies the needs of most large enterprise environments.

However, problems can arise if any of these infrastructure elements are replaced. For example, if the Outlook email client is replaced with Mozilla Thunderbird, groupware and sharing are largely disabled. If Entourage is used instead of Outlook, Mac users cannot synchronize tasks with the Exchange Server. If Internet Explorer is replaced with Firefox or Safari, some of the robust functionality of Outlook Web Access is eliminated because these non-Microsoft browsers do not support ActiveX. The same principles apply across the entire solution in a similar way because everything has been designed to work as a complete set of tools.

However, today's networking environments more often require the use of a number of sub-systems, some of which are not supported by Microsoft. This lack of interoperability with third-party technology can be a serious drawback in Exchange-enabled environments. It appears unlikely that the problems noted above will be resolved anytime soon (although a beta fix to address the task problem is available for Entourage users that access Exchange Server).

If Internet Explorer is replaced with Firefox or Safari, some of the robust functionality of Outlook Web Access is eliminated because these non-Microsoft browsers do not support ActiveX.

This is yet another area in which AXIGEN provides a compelling alternative to Exchange. Up until recently, the product lacked complete support for Active Directory and third party calendaring. However, since the launch of Version 7, a full management console plug-in was added for Active Directory integration along with bidirectional synchronization; sync support was added for LDAP, as well. The other services in AXIGEN are also compatible with a variety of client applications. For example, the Webmail interface works with most of the modern browsers that support advanced JavaScript functionalities. AXIGEN's calendaring features are compatible with Outlook through the native MAPI extension or through the server's iCalendar support.

LARGE-SCALE SOLUTIONS

Very large-scale environments, such as those operated by service providers and hosting companies, need to be able to address a wide variety of requirements for both sophisticated and non-sophisticated users. In addition to extraordinarily robust performance and very high availability, some of the advanced features required in these environments include:

- Advanced clustering support
- Disaster recovery capabilities
- Virtually limitless scalability
- Full compatibility with client applications
- Very high performance in terms of message throughput
- Very high reliability

While Exchange is used in very large-scale environments, Exchange relies on Microsoft-developed clustering technology only and inherits a limitation of a maximum of 16 servers per cluster. This becomes a significant problem once the environment must serve more than 500,000 end-users because many more systems are required to meet the demands of this large a user base.

AXIGEN is also compatible with Microsoft's failover clustering technology and, while used in such an environment, inherits the same limitations. However, because it is not limited to deployment on Windows Server, AXIGEN is also compatible with Linux clustering solutions, such as the one offered by Red Hat with their Advanced Platform line of products. As a result, when AXIGEN is deployed in a Linux clustering environment it is able to sustain an unlimited number of nodes for a cluster (200+ nodes). The actual limitations that apply are networking related and can be overcome with ease if the need exists.

In terms of compatibility, AXIGEN meets the same requirements in a high-end enterprise scenario. Moreover, it is much harder for a free email service provider to impose a single email client on its users (e.g., Microsoft Outlook) for full compatibility with the service. In any AXIGEN deployment, the end-user is given a variety of choices in terms of supported client applications and access scenarios.

In terms of performance, AXIGEN has been tested to perform at very high levels in a large-scale environment. The server is able to process up to 760 messages per second (albeit on high end hardware), or about 65 million messages per day on a single server. If we assume that the average user process 100 messages per day in a large-scale hosted environment, that translates to a single server supporting 650,000 users. Very few email servers currently on the market are capable of providing that level of performance.

About AXIGEN

Established in 2001, Gecad Technologies focuses on the development and distribution of innovative messaging solutions under the brand name AXIGEN.

AXIGEN is an easy, secure and powerful mail server based on innovative technologies, providing unmatched manageability for system administrators. Integrating all modules in a robust messaging solution, AXIGEN is developed for demanding users, from small businesses to large service providers.

AXIGEN was developed with some key guidelines in mind that have been maintained throughout the product development process. These guidelines can still be observed today and make the server stand out from the crowd in virtually any comparison. Further, AXIGEN is regularly updated, with at least two new major, feature-rich releases offered each year since the first public release in 2005.

In terms of development, Gecad's commitment is to build AXIGEN as a worldwide technological milestone. The underlying design philosophy is that email server offerings should meet the specific messaging requirements of any entity, whether a small business or a service provider, while offering a very low TCO.

AXIGEN is one of those alternatives that offer excellent email functionality for organizations of all sizes, including hosted providers, but at much lower cost than for Exchange.

AXIGEN is sold primarily through partners on a worldwide basis. Gecad is committed to establishing and maintaining strong relationships with distributors, resellers and OEM partners all over the world. By integrating the AXIGEN messaging solution into their product portfolio, AXIGEN partners can expand the range of solutions offered to their customers and generate additional revenue streams for their businesses. For further details about AXIGEN Mail Server, please visit: <http://www.axigen.com>.

Summary

Email is critical for workplace communications. It is so critical, in fact, that email has become something of a utility – it must provide the features that users and organizations require, but at as low a cost as possible, just like a water or electric utility. This is a particularly important consideration during economic recessions in which IT budgets are being held constant or are being cut, while demands on email functionality and reliability continue to increase.

Microsoft Exchange is a logical choice for satisfying the demands of users and organizations that rely heavily on email. However, it is more expensive to license, deploy and manage than many alternatives. AXIGEN is one of those alternatives that offers excellent email functionality for organizations of all sizes, including hosted providers, but at much lower cost than for Exchange.

Why You Should Consider an Alternative Email Platform

© 2009 Osterman Research, Inc. All rights reserved.

No part of this document may be reproduced in any form by any means, nor may it be distributed without the permission of Osterman Research, Inc., nor may it be resold or distributed by any entity other than Osterman Research, Inc., without prior written authorization of Osterman Research, Inc.

Osterman Research, Inc. does not provide legal advice. Nothing in this document constitutes legal advice, nor shall this document or any software product or other offering referenced herein serve as a substitute for the reader's compliance with any laws (including but not limited to any act, statute, regulation, rule, directive, administrative order, executive order, etc. (collectively, "Laws")) referenced in this document. If necessary, the reader should consult with competent legal counsel regarding any Laws referenced herein. Osterman Research, Inc. makes no representation or warranty regarding the completeness or accuracy of the information contained in this document.

THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND. ALL EXPRESS OR IMPLIED REPRESENTATIONS, CONDITIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE DETERMINED TO BE ILLEGAL.